

Amendment of the Specification

Please amend the Abstract on page 127 of the specification with the following:

ABSTRACT

This invention ~~provides multivalent~~ Multivalent ligands which carry or display at least one recognition element (RE), ~~and preferably a plurality of recognition elements~~, for binding directly or indirectly to ~~cells or other biological particles or~~ molecules ~~more generally by binding to any biological molecule~~. The multivalent Multivalent ligands ~~provided can~~ most generally function for binding or targeting to any biological particle or molecule and particularly ~~to~~ for targeting of cells ~~or cell types~~ or viruses, for cell aggregation and ~~generally~~ for macromolecular assembly of biological macromolecules. The multivalent ligands ~~of this invention are generally applicable for creating~~ are scaffolds (assemblies) of chemical or biological species, including ~~without limitation~~, antigens, epitopes, ligand binding groups, ligands for cell receptors (~~cell surface receptors, transmembrane receptors and cytoplasmic receptors~~), and various macromolecules (~~nucleic acids, carbohydrates, saccharides, proteins, peptides, etc.~~). ~~In these scaffolds, the number, spacing, relative positioning and relative orientation of recognition elements can be controlled.~~ Multivalent ligands of this invention can carry or display at least one signal recognition element (SRE), ~~and preferably a plurality of signal recognition elements~~, and modulate biological responses in biological systems. Multivalent ligands of this invention can carry or display at least one binding recognition element (BRE), ~~and preferably a plurality of binding recognition elements~~, optionally in combination with one or more SRE, and modulate biological responses in biological systems. The invention also relates to methods for aggregating biological particles and macromolecules and for modulating biological response employing the multivalent ligands ~~provided~~.

Please amend the specification at page 55 as follows:

EXAMPLE 2: Modulation of Neutrophil Chemotaxis

Neutrophil migration is an example of cell migration. Neutrophils migrate toward a number of different endogenous and exogenous substances. N-formyl peptides, bacterial protein degradation products, are one type of exogenous substance that is a chemoattractant for neutrophils [65], a bacterial transcription by product. Neutrophils have cell surface receptors which bind to the chemoattractant and can sense increasing concentration gradients of the chemoattractant. Neutrophils respond to the chemoattractant by migrating toward increased concentrations leading them to the site of infection, for example. In addition, and also in response to such chemoattractants, neutrophils release intercellular signals that affect responses in other cells, particularly other immune systems cells. Multivalent ligands of this invention can be used to enhance the response of neutrophils to chemoattractants and enhance immune system clearance of infectious agents. Scheme 2 illustrates an exemplary N-formyl peptide **20** and an exemplary SRE for that N-formyl peptide **21** (SEQ ID NO. 8) for use in multivalent ligands that modulate neutrophil migration. These signal groups (SREs) can be covalently or noncovalently bonded to ROMP scaffolds such as those illustrated in Scheme 2 (**22** and **23**). Scheme 3 provides exemplary linkers that can be employed in multivalent ligands carrying N- formyl-peptides.

Please amend structures in Scheme 2 as follows:

